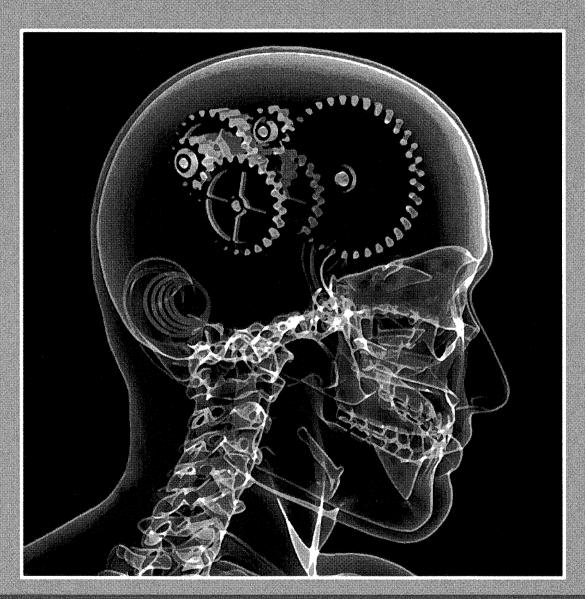
MARYLAND Traumatic Brain Injury Advisory Board



2012

Annual Report

c/o Mental Hygiene Administration Spring Grove Hospital/ Dix Building 55 Wade Avenue Catonsville, MD 21228

The Honorable Martin O'Malley, Governor State House - 100 State Circle Annapolis, Maryland 21401 - 1925

Thomas V. Mike Miller, Jr., President of Senate State House, H-107 Annapolis, Maryland 21401 - 1991

Michael Erin Busch, Speaker of House of Delegates State House, H-101 Annapolis, Maryland 21401 – 1991

Dear Governor O'Malley, Senator Miller, and Delegate Busch:

Brain Injury is an epidemic in our communities. The incidence and prevalence of TBI is staggering and the costs associated with treatment, long term supports and indirect costs continue to rise. The State of Maryland must address this public health issue by improving prevention efforts and access to appropriate treatment and services. The Maryland Traumatic Brain Injury Advisory Board is required to issue an annual report to the governor and the General Assembly by § 13-2105(6) of the Health General Article in accordance with § 2-1246 of the State Government Article.

The enclosed report contains six recommendations which the Board believes represent the needs of individuals with brain injuries, their families, and communities in the state of Maryland. It is critical that the State of Maryland implement these essential recommendations, which will lead to better outcomes for individuals with brain injuries, their families and their communities and will ultimately save the state of Maryland money.

If you have any questions or require additional information, please contact me through Stefani O'Dea, Chief of Long Term Care, Maryland Mental Hygiene Administration at (410) 402- 8476, or by email to stefani.odea@maryland.gov

Sincerely,

Martin Kerrigan, Chair

Table of Contents

Executive Summary	3
Recommendations: Current Status, Requested Action	6
Recommendations	
Establish the State of Maryland Dedicated Brain Injury Trust Fund	
Strengthen the supports and resources available through the Maryland Commitment to Veterans (MCV) Program to support Veterans who have sustained a TBI.	
Modify the technical eligibility requirements for the Home and Community-Based Waiver for Individuals with Traumatic Brain Injury.	
Appropriately identify, assess, and provide services for children and youth with brain injuries.	
Expand the eligibility for targeted case management to include individuals with brain injury.	
Expand the capacity of the Maryland licensed Chronic Hospitals, Nursing Facilities, and Home and Community Based Services providers to address the neurobehavioral needs of Marylanders with brain injury.	
History of the Board & Maryland Accomplishments	13
Appendix A: Advisory Board Membership	14
Appendix B: Maryland Data	16
Appendix C: Trust Fund Development at a Glance	19

Executive Summary

Traumatic Brain Injury (TBI) is a public health crisis. The incidence and prevalence of TBI is staggering and the costs associated with treatment, long term supports and indirect costs continue to rise. Advancement in medical technology and practice has resulted in greater numbers of people surviving catastrophic injuries and living with resulting deficits, disabilities, and co-morbid medical and behavioral health conditions. Prevention and timely access to effective treatment and supports is the strategy that Maryland must employ to decrease the incidence of TBI, improve outcomes for Marylanders who sustain a TBI, and reduce the long-term costs for the State.

Whereas TBI has for many years been an epidemic among civilian population, it has now reached epidemic proportion among our returning service members. In fact, traumatic brain injury is the "signature wound" of the conflicts in Iraq and Afghanistan. From 2000 through the first quarter of 2012, at least 244.217 service members sustained a traumatic brain injury (TBI) according to the Defense Department. The Department of Veterans Affairs (VA) estimates that approximately 20% of the 2.3 million service members who have been deployed since September 2001 have sustained a TBI. In Maryland, 31,927 Active Duty Military personnel and 12,221 reservists have been deployed since September 11th, 2001. Applying the 20% incidence rate means that Maryland is currently home to 8,830 Veterans and/or service members living with the effects of a TBI.

Additionally, while not a new phenomenon, the issue of sports related brain injury and/or concussions has gained much more public awareness. As of May 2012, thirty-eight states, including Maryland and the District of Columbia have youth concussion laws dictating when a player who sustains a concussion can return to play and increasing the number of athletes who access medical treatment as a Chronic Traumatic Encephalopathy (CTE) is a progressive degenerative disease affecting individuals with a history of multiple concussions and other forms of head injury (Boston University) including professional athletes, military service personnel exposed to a blast and/or a concussive injury, and other groups at risk for repetitive head trauma including epileptics and victims of domestic abuse. Individuals with CTE may show symptoms of dementia, such as memory loss, aggression, confusion and depression, which may appear within months of the trauma or many decades later.

result of a concussion. This has lead to further research about the long term effects of multiple concussions and a condition called Chronic Traumatic Encephalopathy, or CTE. This devastating condition affects not only athletes but other individuals who have experienced multiple concussions such as military personnel, individuals with epilepsy, and victims of domestic violence (Saulle and Greenwald 2012). This has led to further research about the long term affects of multiple concussions.

The Maryland Traumatic Brain injury Advisory Board has reviewed and analyzed available National and State data and would like to highlight the following data points:

National TBI Incidence Data

- TBI is the leading cause of death and disability in the United States (Coronado et al 2009).
- Currently 5.3 million persons live in the United States with a disability resulting from a TBI. (CDC 2010)
- Approximately 511,000 TBIs occur among children ages 0 to 14 years; 90% of the brain injuries in this age group result in ED visits. (CDC, 2010)
- The annual economic cost of TBI in the United States, including direct medical and rehabilitation costs, as well as indirect societal economic costs is \$60 billion (Finkelstein, Corso & Miller, 2006). Costs are highest for severe TBI per claimant compared to moderate and mild TBI (Prana, Ruseckaite & Collie, 2012).

DID YOU KNOW?

In Maryland Between 2006-2010...

ED visits due to a TBI have increased by 98% for Marylanders age 45 and older and by 55% for Marylanders under age 45.

Falls were the most common cause of TBI related hospitalizations (43%) and TBI related ED visits (44%).

Motor vehicle crashes and traffic incidents are the second leading cause of TBI related hospitalizations (31%) and TBI related deaths (31%) and the third leading cause of TBI related ED visits (15%).

"Struck by/ against" injuries include assaults & many sports related injuries/ collisions on the field. They account for 30% of TBI related ED visits.

Maryland Medicaid Trends, 2007-2011

The number of MD Medicaid beneficiaries with TBI increased by 37%.

Eighty-nine (89)% of Medicaid beneficiaries with a history of TBI are not enrolled in any HCBS services.

Maryland TBI Incidence Data

According to Maryland TBI incidence data provided by the Department of Health and Mental Hygiene (DHMH), between 2006 and 2010:

Emergency Department trends

- There were 170,039 Emergency Department (ED) visits resulting from TBIs. This represents an overall 66% increase in TBI related ED visits over the five year period.
- When stratified by age, ED visits increased by 55% for Marylanders under age 45 and increased by 98% for Marylanders age 45 and older.
- Falls were the most common cause of TBI related ED visits (44%), followed by struck by/against (30%), followed by motor vehicle crashes/traffic related incidents (15%).

Hospitalization Trends

- There were 33,501 hospital admissions resulting from a TBI. The highest rate of hospital admission was among individuals aged 15-55.
- Falls were the most common cause of TBI related hospitalization (43%), followed by motor vehicle crashes/traffic related incidents (31%), followed by struck by/against (11%).

Mortality Data Trends

- 3,422 people died as a result of a TBI. Consistent with national data from the CDC, individuals age 75 and older had the highest rate of death resulting from TBI.
- Firearms are the most common cause of TBI related fatalities (41%), followed by falls (35%), followed by motor vehicle crashes/traffic incidents (14%).

Maryland Medicaid Data

According to the two studies conducted by the Hilltop Institute at University of Maryland Baltimore Campus (UMBC) in 2008 and 2012:

- Between 2007 and 2011, there was an average of 7,287 Medicaid beneficiaries per year with a history of TBI and/or anoxia. The number of Medicaid beneficiaries with TBI increased by 37% between 2007 and 2011
- Eighty-nine (89)% were <u>not enrolled</u> in any Home and Community Based Services (HCBS).
- Sixty-one (61)% of the beneficiaries with TBI were under age 50 and thirty-nine percent (39)% were over age 50.
- The service utilization for the "enrolled group" and the "not enrolled group" are very different. Based on average costs per user, nursing facility services and inpatient services are among the top three services for the "not enrolled group".
- For both the enrolled and the not enrolled groups, costs were highest for those beneficiaries who experienced both Anoxia and a TBI. The second highest costs were for the Anoxia only group and the lowest costs were for the TBI only group.

According to the study titled, An Analysis of Medicaid Costs for Person with Traumatic Brain Injury While Residing in Maryland Nursing Facilities (2008), the Hilltop Institute at UMBC found:

- About 2000 people who are Medicaid beneficiaries with TBI are in Maryland nursing facilities. This is approximately 8.5% of total number of individuals that have a nursing home stay in a given year.
- While numbers of individuals within Maryland Nursing facilities decreased slightly (8%) over the study period (2004-2006), the cost of their Medicaid services have increased (10%).
- The longer a person with TBI stays in a nursing facility, the higher the costs over time.
- The average annual costs for individuals with brain injury with Medicaid only who have a long stay are \$101,064. A few individuals have annual costs as high as \$423,006.

Maryland 2012 Needs and Resources Assessment

The Maryland Traumatic Brain Injury Advisory Board in collaboration with the Mental Hygiene Administration and the Brain Injury Association of Maryland conducted a web based needs and resources assessment in 2012. Marylanders with brain injury, family members of individuals with brain injury, advocates and professionals who work with individuals with brain injury were asked about their experiences and identified needs regarding brain injury supports and services. The following is a brief summary of the responses:

- A total of 177 individuals with TBI, family members and professionals completed the survey representing 22 of Maryland's 24 counties and jurisdictions
- According to individuals and families, the majority of individuals are unemployed, with individuals with brain injury citing the inability to do their former work as a primary reason
- Sixty (60)% of individuals with brain injury and thirty-nine (39)% of family members surveyed are dissatisfied with services available to people with brain injury in the state. Concerns voiced include; *lack of*

"I am alone and cannot manage complex medical care. I need help. I need assistance and I need a brain."

Marylander with TBI, Needs and Resources
Assessment comment

- an awareness and understanding among the public and professionals, difficulty managing complex medical care without assistance, not enough providers, not enough access due to geographic location and/or funding for cognitive therapy, lack of case management, behavioral health services, and lack of neurobehavioral facilities especially for young people.
- Professionals reported difficulty serving and finding appropriate placement for those individuals with challenging behaviors

"We need more funding, more awareness, more training for all public service providers such as schools and other institutions that support people with brain injury."

Family Member, Needs and Resources Assessment comment

 Professionals cite the following as the most significant gaps in services in Maryland for individuals with brain injury; lack of specialized services (neurobehavioral and substance abuse), limited range of funds for service needs, and a lack of brain injury training/knowledge among human service providers and other professionals.

"It is extremely difficult for families to manage people with TBI who live at home. More services are needed to provide assistance in the home, especially for people who are physically capable but difficult to manage because of their poor judgment and poor impulse control. Having a case manager who is familiar with brain injury and can help with coordinating services is of the utmost importance."

Family member, Needs and Resources Assessment comment

Recommendations for Maryland

Based on available epidemiological data, Medicaid claims data, and the results of the needs and resources survey, the Maryland Traumatic Brain Injury Advisory Board strongly recommends the following:

- 1. Establish the State of Maryland Dedicated Brain Injury Trust Fund
- 2. Strengthen the supports and resources available through the Maryland Commitment to Veterans (MCV) Program to support Veterans who have a sustained a TBI.
- 3. Modify the technical eligibility requirements for the Home and Community-Based Waiver for Adults with Traumatic Brain Injury to allow:
 - Otherwise qualified and interested individuals with a brain injury to transition from Medicaid paid institutional settings back into their homes and communities regardless of whether the facility is owned and operated privately or by a state agency;
 - Require the Department of Health and Mental Hygiene to increase the number of facilities that meet the technical eligibility requirements for the waiver to replace those lost due to closure.
- 4. Appropriately identify, assess, and provide services for children and youth with brain injuries.
- 5. Expand the eligibility for targeted case management to include individuals with brain injury.
- 6. Expand the capacity of the Maryland licensed Chronic Hospitals, Nursing Facilities, and Home and Community-Based Services to address the neurobehavioral needs of Marylanders with brain injury.

Emerging Trends:

- The Maryland Traumatic Brain Injury Advisory Board has reviewed TBI incidence data that indicates that Emergency Department visits related to TBI are on the rise in Maryland and falls are the primary cause of these injuries. ED visits have increased by 55% for Marylanders under age 45 and by 98% for Marylanders over age 45 since 2006. The Board recommends that DHMH examine the cause of this trend and consider targeting prevention and treatment efforts to improve it.
- Private insurance benefits, even the State Employee benefit plans, do not include adequate rehabilitation services that are needed to recover from a brain injury and beneficiaries often do not even have an option of appealing a decision because there are no appeal rights for uncovered benefits. Maryland's list of essential health benefits must include inpatient and outpatient neurorehabilitation services.

Recommendation #1 Establish the State of Maryland Dedicated Brain Injury Trust Fund.

FACTS: In 2011 more than 41,000 Marylanders sustained a life-altering Traumatic Brain Injury (TBI) requiring an Emergency Department and/or Hospital visit. More than 5,600 people were hospitalized. In addition, there are approximately 8,830 Maryland Veterans who have a sustained a TBI since 2001. And the number of Maryland Medicaid beneficiaries with TBI increased by 37% between 2007 and 2011.

RECOMMENDED ACTION:

The Maryland Traumatic Brain Injury Advisory Board (the Board) strongly recommends that the Governor implement a \$2.00 per vehicle registration surcharge (\$1.00 per year on a two year registration) on all vehicle registrations. The funds collected would go directly to the State of Maryland Dedicated Brain Injury Trust Fund. Additionally the Board recommends donations could be accepted from the public and business/professional communities. The creation of the State of Maryland Dedicated Brain Injury Trust Fund should be a top priority requiring the full support of the Governor and legislature in the 2013 legislative session.

JUSTIFICATION:

The staggering number of Marylanders sustaining a Brain Injury put a large burden on an already revenue-strapped state budget. To help alleviate that situation, the Board urges the immediate creation of a State Dedicated Brain Injury Trust Fund (The Trust Fund) to provide services that are urgently needed now for the increasing numbers of our residents who have, or will have, a TBI and who have exhausted all other resources.

The Trust Fund is needed to provide an additional funding source to Marylanders, who need specialized services that may not be covered by Medicare/Medicaid, their private insurance, or who have no insurance at all. Such critical core services such as neuropsychological evaluations (crucial to establish a baseline to measure all future progress), individual case management (to advocate for, plan, and implement an action plan for rehabilitation and recovery), and cognitive rehabilitation (absolutely vital in the rehabilitation and recovery process) are often denied by insurance carriers. Note: the Trust Fund is to be used only as a last resort when coverage has been denied, exhausted, or where coverage does not exist. Maryland cannot afford to wait any longer to create The Trust Fund; its creation will actually save the state money by minimizing Maryland's rising financial burden with respect to TBI.

Based on review and analysis of the 22 states that currently have a TBI Trust Fund (with additional states actively considering a similar fund), The Trust Fund Committee of The Board, with input from members of the Governor's Office, the Secretary of the Department of Health and Mental Hygiene, the Secretary of the Department of Disabilities, the Senate, the House of Delegates, the Brain Injury Association of Maryland, the Maryland Brain Injury Providers Council, and Brain Injury Support Groups throughout the state, developed legislation for creation of The Brain Injury Trust Fund.

A strong coalition is in place to support the establishment of The Trust Fund. The Governor has given us his commitment to continued collaborative efforts to improve the lives of Marylanders living with brain injury.

Recommendation #2 Strengthen the supports and resources available through the Maryland Commitment to Veterans Program to support <u>Veterans who have sustained a TBI.</u>

FACTS: From 2000 through the first quarter of 2012, 244,217 service members sustained a traumatic brain injury (TBI) according to the Defense Department. The literature suggests that TBI may affect 20% of the 2.3 million service members nationwide who have deployed since 200. Approximately 8,830 Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF) Maryland Veterans have sustained a TBI during their service.

RECOMMENDED ACTIONS:

The Maryland Commitment to Veterans Program must implement the following in order to better meet the needs of Maryland Veterans with brain injury:

- Screen all Veterans who access the program for a history of brain injury and report the aggregate data to the Maryland State Traumatic Brain Injury Advisory Board.
- Incorporate training about brain injury into the current provider training curriculums.
- Identify and establish brain injury providers and services for Veterans.
- Promote best practices developed by Department of Defense funded programs such as the Defense and Veterans Brain Injury Center and the National Intrepid Center of Excellence on Traumatic Brain Injury and Psychological Health among MCV providers.

JUSTIFICATION:

Many Maryland Veterans struggle with multiple impairments resulting from TBI; impairments resulting from even mild TBI can affect vocational/academic, physical, cognitive, and emotional aspects of the lives of our returning service members and their According to the 2011 Census families. Those with more significant impairments may need long-term Bureau report, veterans who rehabilitation and long-term care. Many veterans who were in the National served in Iraq, Afghanistan, or Guard did not enroll with the Department of Veterans Affairs upon their return both had an unemployment and their benefits have expired. Studies have demonstrated that for patients with rate of 11.6 percent in August

brain injuries, the most effective means of full rehabilitation involve an active case manager and an interdisciplinary team.

On Aug. 31, President Barack Obama signed an executive order to improve access to mental health services for veterans, service members and military

the population

2011, higher than the rest of

families. As part of that executive order, President Obama directed Department of Defense (DOD), the Department of Veterans Affairs (VA), the Department of Health and Human Services (DHHS) and the Department of Education to develop a National Research Action Plan that will include strategies to improve early diagnosis and treatment effectiveness for TBI and Post Traumatic Stress Disorder (PTSD) and to conduct a comprehensive mental health study, with an emphasis on PTSD, TBI, and related injuries to develop better prevention, diagnosis, and treatment options.

The Board is not aware of any efforts that the MCV Program has made to collect data related to TBI, develop TBI-specific resources for veterans, or include TBI related resources and information on its website or in project reports. TBI has been named the 'signature deficit' of the Iraq and Afghanistan wars, yet it is not being addressed by the State of Maryland. In order to fully serve this population of wounded warriors, it is imperative that their needs and those of their families be the focus of a new initiative.

Recommendation #3 Modify the technical eligibility requirements for the Home and Community-Based Waiver for Adults with Traumatic Brain Injury.

FACTS: There are over 7,000 Maryland Medicaid beneficiaries with a history of TBI each year. Fewer than 800 of those beneficiaries are enrolled in a Home and Community Based Service. Approximately 2,000 Medicaid beneficiaries with TBI enter a nursing facility each year. The TBI waiver access is limited to individuals transitioning out of certain hospital settings. Access has become more restricted due to the closure of University Specialty Hospital in 2012.

RECOMMENDED ACTIONS:

Require the Department of Health and Mental Hygiene to:

- Accept and process applications for Maryland's TBI Home and Community-Based Waiver for Individuals with Traumatic Brain Injury from qualified individuals regardless of whether their Medicaid paid institutional setting is owned and operated privately or by the state.
- Increase the number of facilities that meet the technical eligibility requirements for the waiver to replace those lost due to closure.

JUSTIFICATION:

Since 2007, The Department of Health and Mental Hygiene (DHMH) has expanded access to the TBI waiver via Maryland's Money Follows the Person Demonstration Initiative. Through its flexible use of Medicaid funds, DHMH has eliminated barriers to provide a limited number of individuals with brain injuries the long term services they need to be able to live in the setting of their choice. DHMH has promoted forward thinking policies, like adopting a more inclusive definition of brain injury and creating innovative pilot programs to expand the opportunities for brain injured individuals to live outside of an institutional setting. In order to optimize the State of Maryland's rebalancing efforts, reduce the proportion of LTSS (Long Term Services and Supports) spending on nursing facilities, and further implement the tenets of Person Centered Planning and Money Follows the Person, Maryland should modify the technical eligibility requirements for the Home and Community-Based Waiver for Individuals with Traumatic Brain Injury

Despite Maryland's "ongoing commitment to serving individuals in the most integrated setting", there are many individuals with brain injury, who are not able to access Maryland's waiver services simply because their Medicaid-paid stay is in a privately owned nursing facility rather than a state owned facility. In addition, with the closure of the University Specialty Hospital Traumatic Brain Injury program, only three facilities currently meet the technical eligibility criteria allowing an individual to apply for Maryland's TBI waiver. A 2009 study by the Hilltop Institute at the University of Maryland, Baltimore Campus (UMBC) concluded that over 2,000 Marylanders with TBI currently reside, and receive long term care services, in private nursing facilities. That same study also found that the longer a person with TBI remained in a nursing facility, the higher the Medicaid costs accrued over time. While the TBI Advisory Board understands that many of the 2,000 people in the study may choose to stay in a facility, and many who want to transition may be well served with another Home and Community Based waiver, many residents with brain injury will not be able to transition from an institutional setting to a community setting without the TBI Waiver.

Between 2007 and 2011, the number of Maryland Medicaid beneficiaries with a traumatic brain injury increased by 37%. Eighty-nine percent of all Medicaid beneficiaries with a TBI are <u>not enrolled</u> in a Home and Community-Based

Recommendation #4 Appropriately identify, assess, and provide services for children and youth with brain injuries.

FACTS: In Maryland, over 6,500 children and youth between the ages of birth and 21 were hospitalized for a traumatic brain injury (TBI) between 2005-2009. Despite these significant numbers of brain injuries in Maryland's school aged population, there were only 261 student identified statewide in 2011 receiving special education services under the Individuals with Disabilities Education Act (IDEA) classification code for TBI, in both public and non-public educational settings.

RECOMMENDED ACTION:

Require the Maryland State Department of Education (MSDE) to increase public and professional awareness of brain injury in children and youth and the possible adverse effects on learning and behavior through the following:

- Prepare a Technical Assistance Bulletin (TAB) to address the proper identification of students with brain injuries and appropriate strategies and resources to support them within the educational setting targeted to the following stakeholders: parents/guardians, school psychologists, school nurses, guidance counselors, general and special educators, pupil personnel workers, related service providers, principals, special education directors, school administrators, athletic directors, trainers and coaches.
- Include a question regarding TBI or any form of "head trauma" or loss of consciousness during any screening process and on required yearly School Health Forms and develop a processor protocol for school health personnel to inform school IEP teams of students with a positive response to that question.
- Provide training and information to families, students, and school personnel, throughout the state, related to brain injury utilizing resources such as the Specialized Health Needs Interagency Collaboration project already supported by MSDE. Increase the awareness of moderate and mild TBI including concussions and their prevalence in school aged children, and increase dissemination of concussion awareness trainings to school athletic departments, coaches, and trainers throughout the State educational system.
- Set up a taskforce involving the key stakeholders identified above to research successful systems of management of students with TBI utilized in other states (such as PA, CO, OH and OR) and develop a TBI implementation procedural guide for Maryland school systems.
- Create a "Brain Injury Specialist" position within MSDE to serve as liaison between MSDE, local school systems, and the medical community. Duties of this position would include providing technical assistance, support, and training to the MSDE as well as to local education agencies.
- Partner with the BIAM to establish a workgroup to update the existing brain injury education module and disseminate the resource to the local education agencies. In addition, this workgroup may work on developing professional development modules to address the needs of educational personnel in this area.

JUSTIFICATION:

TBI can have a significant impact on classroom performance and behavior in children and youth. TBI became a category for special education eligibility in 1991, and is defined currently under IDEA Code of Regulations Part 34 Sec 300.8 © (12). There is a significant discrepancy between TBI incidence data and data from MSDE regarding the number of school aged individuals that incur a TBI every year compared to the number of students currently identified as requiring educational support in schools due to a TBI. Without proper identification and assessment, students with a diagnosis of TBI cannot be served appropriately. Their ability to be successful in school and successfully transition to adulthood is compromised, and the likelihood of consuming valuable State resources in the future increases.

Recommendation #5 Expand the eligibility for targeted case management to include individuals with brain injury.

FACTS: Over 5,000 Marylanders experience a TBI each that is serious enough to require hospitalization. There are more than 40,000 Emergency Department visits each year resulting from a TBI. The percentage of Medicaid recipients living in Maryland with a TBI has increased by 37% since 2007.

RECOMMENDED ACTION:

Require the Department of Health and Mental Hygiene (DHMH) to include brain injury as a qualifying diagnosis for targeted case management.

JUSTIFICATION:

Despite the high incidence of TBI in our state, the growing trends of TBI among our aging population, and the increased burden on the Medicaid system as a result, there is no case management system in Maryland for individuals with brain injury. The following table shows the number of Marylanders who are able to access targeted case management (mental health case management). Fewer than 50 people per fiscal year are able to access this service because currently eligibility does not include brain injury as a qualifying diagnosis. The average cost of targeted management per person is \$2,000 per annually. The Developmental Disabilities Administration (DDA) is also in the process of implementing a Targeted Case Management Program that could be made available to Marylanders with brain injury.

Number of Individuals with a TBI Diagnosis Who Received Mental Health Case Management Services, by Age Group and Fiscal Year

Age Group	FY 2010	FY 2011	FY 2012
0 to 22	8	13	8
23 to 49	16	26	13
50 to 64	9	9	6
65 to 74	1	1	2
75 Plus	1	0	0
Unknown	1	0	2
Total	36	49	31

The effects of brain injury can be severe and long lasting. Individuals with brain injury, especially those with moderate to severe injuries, are at risk of a wide array of social and health related problems such as substance abuse, social isolation, criminal activity, suicide, homelessness, and co-morbid medical and behavioral health conditions. Rates of unemployment following brain injury range from 60-90%. Available literature suggests that case management has a positive and significant impact on employment and community integration for individuals with brain injury (Journal of Head Trauma Rehabilitation, 2010).

DHMH modified its brain injury resource coordination program model in 2012. Resource Coordination services are now provided by the Brain Injury Association of Maryland (BIAM). DHMH is maximizing resources by leveraging the infrastructure of Maryland Access Point (MAP- Maryland's "no wrong door" to long term care services and supports) program. While the Board supports this coordinated and statewide effort, it is not a replacement for an individual case management service. The Board feels it will be important for DHMH to capture data about Marylanders with brain injury that access MAP and the BIAM.

"Unidentified traumatic brain injury is an unrecognized major source of social and vocational failure"

Wayne Gordon, Ph.D, Brain Injury Research Center at Mount Sinai School of Medicine quoted in the Wall Street Journal January 2008 Recommendation #6
Expand the capacity of Maryland licensed chronic hospitals,
nursing facilities, and home and community-based services to
address the neurobehavioral needs of Marylanders with brain
injury.

FACTS: Maryland does not have a continuum of care to meet the complex neurobehavioral needs of individuals with brain injuries. The literature suggests that up to ten percent (10%) of individuals who sustain a brain injury require long term, intensive supports because of neurobehavioral issues (BIAA/McMorrow). The lack of appropriate long term intensive services increases costs for Maryland Medicaid and Maryland Department of Corrections because the unmet needs result in inappropriate state paid services, unnecessary hospitalizations, and incarceration.

RECOMMENDED ACTION:

Require the Department of Health and Mental Hygiene to:

- Create a brain injury neurobehavioral level of care and specialty designation in Maryland licensed chronic hospital(s) and/ or nursing facility(s).
- Implement the recommendations of the Money Follows the Person Behavioral Health Committee related to improving the capacity of Home and Community-Based Services (HCBS) to supports Medicaid beneficiaries with brain injury and other behavioral health issues.

JUSTIFICATION:

While awareness of the cognitive and physical changes that occur after a brain injury and the subsequent rehabilitative needs are becoming increasingly familiar to the public and to healthcare providers, the behavioral changes and challenges remain an under-recognized and under-treated issue. Yet behavioral deficits are a major impediment to the brain injury recovery process and impact an individual's ability to engage in rehabilitation, return home to family, return to work, maintain personal safety, and transition out of long term care institutional settings. Common behavioral challenges include verbal and physical aggression, agitation, limited self-awareness, altered sexual functioning, impulsivity and social disinhibition (NASHIA, 2006). The literature suggests that agitation and aggression develops in 20-49% of children who sustain a TBI and 25-33% of adults who sustain a TBI, usually within one year of sustaining the injury (Kim et. al. 2007 & Baguley, Cooper, Flemingham 2006).

Some individuals with brain injury who experience significant neurobehavioral and neuropsychiatric challenges require specialized and integrated treatment programs designed for those with brain injury. These programs are essential to ensuring the safety of this population as well as the communities they live in. Those who reach this level of need have almost always depleted any personal resources they or their family may have and are often reliant upon publicly funded programs, or are incarcerated as a result of their behavioral challenges. States have experienced class action lawsuits on behalf of individuals with brain injury who are institutionalized in nursing facilities or state psychiatric hospitals because of the lack of available resources in the community. The CDC reports that as much as 87% of the prison population in the U.S. has sustained at least one TBI. Individuals get "stuck" in emergency departments and community hospitals because appropriate and safe discharge options are not available. When appropriate services are not available within a state, many states (including Maryland) resort to paying for specialized services out of state ranging in price from \$800-\$1,200.00 per day for the few who manage to access those services.

History of the Maryland Traumatic Brain Injury Advisory Board

The Maryland Traumatic Brain Injury (TBI) Advisory Board was established in 2005 and charged with advising the State Legislature and the Governor on the impact of brain injury on the State. The Board is responsible for writing an annual report with recommendations regarding needed services and supports for individuals living with brain injury as well as prevention efforts. The Board consists of individuals with brain injury and family members, experts in the field of brain injury, professionals who work with individuals with brain injuries, representatives from State Agencies, advocacy organizations, and caregivers of individuals with brain injuries. A list of Advisory Board members is attached as Appendix A.

The Board has established one standing committee, SAFE (Survivors and Families Empowered). The SAFE committee was created as a place for the members of the Maryland Traumatic Brain Injury Advisory Board who are living with a brain injury or who are family members of individuals with brain injuries, to feel support and to foster a sense of unity in board matters. One of the main goals of the committee is to ensure that individuals with brain injury and family members are active participants in Board meetings and activities.

Maryland Accomplishments:

Since the establishment of the Maryland TBI Advisory Board some progress has been made to improve the system of services and supports available to Marylanders with brain injury. Through active participation in a multitude of committees, workgroups and task forces, the Board has successfully advocated for important policy changes and decisions, including:

- Introduced and garnered strong support in the 2012 Legislative Session for a bill that would have a created a Brain Injury Trust Fund in Maryland. Senate Bill 577 passed unanimously in the Senate Finance Committee with many of the members signed on as co-sponsors. House Bill 194 narrowly missed passing the House Appropriations Committee by two votes (12-10). Had it gone to the house floor, there likely would have had ample support to pass the bill.
- In response to a recommendation contained in the 2011 report, DHMH agreed to modify the definition of brain injury of brain injury that is used in the Home and Community Based Services Waiver for Adults with TBI to a broader acquired brain injury definition.
- On May 19, 2011, Governor Martin O'Malley signed a concussion bill mandating the implementation of concussion-awareness programs throughout the state and requiring student athletes who demonstrate signs of a concussion to be removed from practice or play. The injured student athlete may return to play only after receiving clearance by a licensed health care professional trained in the diagnosis and treatment of concussions. The law will help to reduce the severity of some brain injuries, provide individuals access to appropriate medical services sooner and will have a profound impact by increasing awareness. This bill was a collaborative effort between: Lifebridge Health/Sinai Hospital; Children's National Medical Center; Brain Injury Association of Maryland and the NFL. The concussion implementation committee was re-established by MSDE in 2012.
- Board members have successfully advocated against the repeal of Maryland's motorcycle helmet law. The Board is committed to brain injury prevention and minimizing the severity of injury after an accident and wearing motorcycle helmets has been proven to prevent or minimize the severity of injury. Multiple states have repealed only to reinstate all-rider helmet laws due to the significant increase in motor cycle deaths (Louisiana, Texas, Arkansas, Florida). An evaluation of data collected for the Florida Department of Transportation demonstrates that since its' all helmet law repeal in 2000, motorcycle deaths have risen almost 42 percent (NHTSA).

Appendix A: Maryland Traumatic Brain Injury Advisory Board Members

Grace Anyadike

Department of Health and Mental Hygiene Alcohol and Drug Abuse Administration Catonsville, Maryland

Angela Baldwin-Austin

Representing Individuals with Brain Injury District Heights, Maryland

Jan Caughlan

Healthcare for the Homeless Baltimore, Maryland

Mary Lou Coppinger

Representing Families/Caregivers of Individuals with Brain Injury Baltimore, Maryland

Joyce Dantzler

Center for Health Promotion
Department of Health and Mental Hygiene
Baltimore, Maryland

Corey Davis

Representing Individuals with Brain Injury Berlin, Maryland

Sandy Davis

Brain Injury Association of Maryland Owings Mills, Maryland

Christine Deeley Wood

Representing Families & Caregivers Montgomery County, Maryland

Laurie Elinoff

Statewide Independent Living Council, Vice Chair Representing Individuals with Brain Injury Millersville, Maryland

Janet Furman

Department of Health and Mental Hygiene Developmental Disabilities Administration Baltimore, Maryland

Pamela Harman

Veteran's Administration Washington D.C.

Paul Hartman

Statewide Independent Living Council Representing Individuals with Brain Injury Frederick, Maryland

Kathleen D. Heck, Ph.D.

Maryland State Department of Education Division of Special Education/ Early Intervention Services Baltimore, Maryland

Linda Hutchinson-Troyer

Brain Injury Association of Maryland Baltimore, Maryland

Martin Kerrigan

Representing Individuals with Brain Injury Columbia, Maryland

Terry Kirtz

Representing Families/Caregivers of Individuals with Brain Injury Washington Grove, Maryland

Vassilis Koliatsos, MD

The Neuropsychiatry Program at Sheppard Pratt Baltimore, Maryland

Ileana Luciani

Maryland Disability Law Center Baltimore, Maryland

Jennifer Massetti

R Adams Cowley Shock Trauma Center Baltimore, Maryland

Jo Anne Materkowski

Maryland State Department of Education Baltimore, Maryland

Carole A. Mays, RN, MS, CEN

Maryland Institute for Emergency Medical Services Systems Baltimore, Maryland

Stefani O'Dea

Department of Health and Mental Hygiene Mental Hygiene Administration Catonsville, Maryland

Bryan Pugh

Brain Injury Association of Maryland Baltimore, Maryland

Valerie Roddy

Representing Maryland Department of Health and Mental Hygiene Baltimore, Maryland

Diane Triplett

Brain Injury Association of Maryland Baltimore, Maryland

Adrienne Walker-Pittman

Representing Individuals with Brain Injury Baltimore, Maryland

Cari Watrous

Maryland Department of Disabilities Baltimore, Maryland

Michael Weinreich, PhD

National Institute of Health Bethesda, Maryland

Sean Westley

Representing Families/Caregivers of Individuals with Brain Injury Baltimore, Maryland

Denise White

Department of Health and Mental Hygiene Baltimore, Maryland

Patricia Williamson

Children's Medical Services Program
Department of Health and Mental Hygiene
Baltimore, Maryland

Richard Zeidman

Representing Families/Caregivers of Individuals with Brain Injury Rockville, Maryland

Staff to the Board

Nikisha Marion

Mental Hygiene Administration Catonsville, Maryland

Victor Henderson

Maryland Department of Disabilities Baltimore, Maryland

Appendix B:

Traumatic Brain Injury (TBI related) Deaths, Hospitalizations, and Emergency Department Visits

Maryland Department of Health and Mental Hygiene, Prevention and Health Promotion Administration

TBI-related fatalities, Maryland Residents, 2-year experience, 2009 - 2010

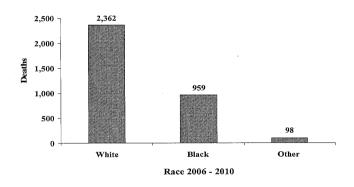
Years Number of Deaths Age of Decedents* 05-14 15-24 25-34 35-44 45-54 55-64 65-74 75-84 85+

xx= cell counts suppressed to preserve confidentiality

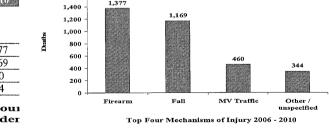
	600							534	
	500 -	455			459				464
ø	400 -		376	403		354			
Deaths	300 -						297		
	200 -								
	100 -								
	0								
	0	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85 ÷
				A	ge Grou	ps 2006 -	- 2010		

		2006	2007	2008	2009	2010	06 - 10
Gender of							
Decedents							
	Female	171	194	202	186	148	901
	Male	504	536	499	529	453	2,521

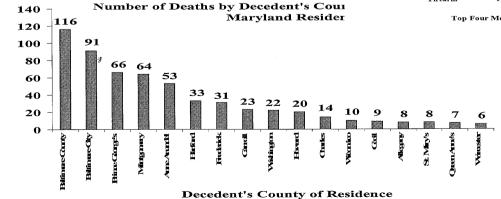
	2006	2007	2008	2()(10	2010	06 - 10
Race of Decedents*						
White	449	508	493	482	430	2,362
Black / African	213	205	188	199	154	959
Other Race	13	17	20	31	17	98



	2006	2007	2008	2009	2010	06 - 18
Top Four						
Mechanisms of						
Injury						
Firearm	295	280	282	287	233	1,377
Fall	209	244	246	239	231	1,169
MV Traffic	95	108	94	103	60	460
Other / unspecified	67	87	68	62	60	344



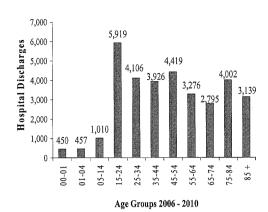
1.600



Note- The following counties had cell counts <6 and are therefore not included in the graph to preserve confidentiality:- Calvert, Caroline, Dorchester, Garrett, Kent, Somerset, Talbot.

TBI-related Inpatient Hospital Discharges (non-fatal), Maryland Residents / Maryland Hospitals, 5-year experience, 2006 – 2010

			<u>Years</u>			
	2006	2007	2008	2009	2010	06 - 10
Number of Hospital	6,792	7,039	7,056	6,946	5,668	33,501
Discharges ^{1,2}						
	2006	2007	2008	2009	2010	06 - 10
Age of Injured ^{1,2}						
00-<01	82	99	95	107	67	450
01-04	103	97	93	96	68	457
05-14	226	251	191	194	148	1,010
15-24	1,394	1,322	1,238	1,045	920	5,919
25-34	890	868	878	770	700	4,106
35-44	898	877	805	750	596	3,926
45-54	881	882	944	957	755	4,419
55-64	610	640	674	710	642	3,276
65-74	453	571	605	658	508	2,795
75-84	740	827	871	898	666	4,002
85 +	515	605	662	761	596	3,139

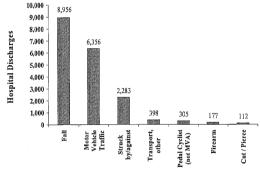


	2006	2007	2008	2009	2010	0.6 - 10
Gender of Injured ^{1,2}						
Male	4,344	4,411	4,397	4,258	3,620	21,030
Female	2,448	2,625	2,655	2,688	2,047	12,463

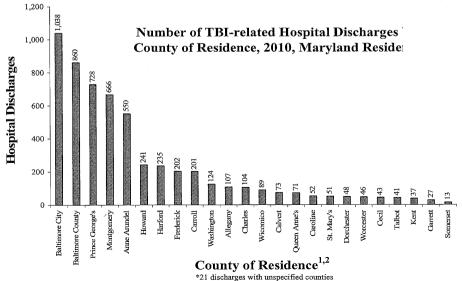
	2006	2007	2008	2009	2010	06 - 10
Race of Injured ^{1,2}				}		
White	4,124	4,417	4,433	4,308	3,491	20,773
Black/ African	2,020	1,981	1,938	1,975	1,627	9,541
Asian / Pacific Islander	92	109	113	121	94	529
Native American	6	13	10	21	16	66
Other Race	543	498	551	513	437	2,542

SS	25,000	20,773				
narg(20,000 -	20,773				
Discl	15,000 -					
ital]	10,000		9,541			
Hospital Discharges	5,000 -			529		2,542
	0 +			329	66	
	•	White	Black	Asian / Pac Islander	Native American	Other
			·R	ace 2006 - 20	10	

	2006	2007	2008	2009	2010	06-10
Mechanism of Injury ^{1,3}						
Fall	1,467	1,776	1,824	1,964	1,925	8,956
Motor Vehicle Traffic	1,551	1,427	1,256	1,100	1,022	6,356
Struck by/against	544	440	472	453	374	2,283
Transport, other	99	92	70	68	69	398
Pedal Cyclist (not MVA)	54	66	61	61	63	305
Firearm	41	35	21	34	46	177
Cut / Pierce	30	31	19	9	23	112
Other / unspecified	369	404	482	427	216	1,898



Mechanism of Injury 2006 - 2010



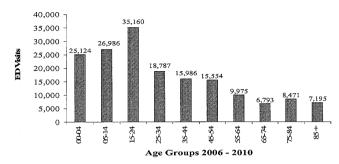
- ¹All cases are discharges of persons who survived to discharge. Any hospital stay during which the victim died is not included.
- ²Based on cases where TBI diagnosis was identified anywhere among the several diagnoses associated with the patient's hospitalization.
- ³Table is limited to case where a TBI diagnosis was the Principal Diagnosis clearly the main reason for the hospital stay. A valid External Cause code found in the primary 'E-Code' position of the discharge record indicates the mechanism. If no valid E-Code was found, then the record was classified to the 'Other/Unspecified' category.

TBI-related Emergency Department Visits (non-fatal), Maryland Residents / Maryland Hospitals, 5-year experience, 2006 - 2010

Years

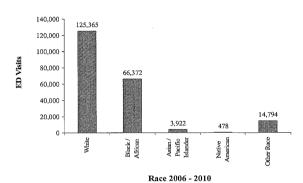
		200000000000000000000000000000000000000	SOMEON AND AND AND AND AND AND AND AND AND AN		XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
	E000000A74747A7A0000	0000000533Y436-900000	0000006AX3Y3Y3Y4W0000	0000000673Y2Y2Y2	8000000A 7 8 W F 8 W 80000	E0000000 1 Y / 80000 8 3 1 10000000
	######################################	00000000000000000000000000000000000000	00000000000000000000000000000000000000	00000000	00000004-5.3 S.S.S.O0000	BOX 000 00 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			• • • • •			4 20 000
Number of Emergency Dept. Visits'	1 2/1005	3/1/267	21020	10 775	1 41 472	1 17/11/11/20 1
Number of Emergency Dept. Visits ¹	44,223	30,007	31,300	40.723	41,4/4	1 1/0,032 1

	2006	2007	2008	2009	2010	H6 - H
Age of Injured ¹						
00-04	3,897	4,667	4,718	6,128	5,714	25,124
05-14	4,052	4,907	4,921	6,641	6,465	26,986
15-24	5,478	6,461	6,601	8,216	8,404	35,160
25-34	2,689	3,361	3,596	4,451	4,690	18,787
35-44	2,532	3,042	3,086	3,668	3,658	15,986
45-54	2,152	2,726	2,909	3,779	3,988	15,554
55-64	1,261	1,684	1,833	2,521	2,676	9,975
65-74	866	1,216	1,238	1,683	1,790	6,793
75-84	1,162	1,547	1,671	1,983	2,108	8,471
85+	906	1,246	1,410	1,654	1,979	7,195

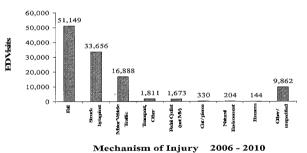


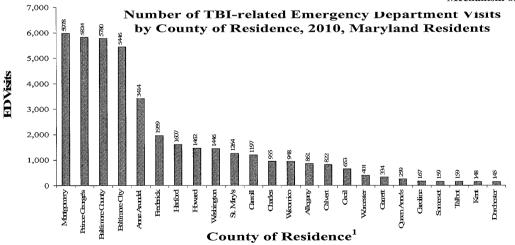
	2007	2007	2008	2009	2010	06 - 10
Gender of Injured ¹						
Male	13,953	17,238	17,487	21,627	21,959	92,264
Female	11,041	13,618	14,489	19,088	19,512	77,748

	2006	2007	2008	2009	2010	06 - 10
Race of Injured1						
White	15,465	18,574	18,854	24,250	24,111	101,254
Black / African	7,391	9,494	10,089	12,600	13,399	52,973
Asian / Pacific	449	547	589	775	781	3,141
Islander						
Native American	52	87	86	87	83	395
Other Race	1,564	2,052	2,299	2,895	2,992	11,802



	2006	2007	2008	2(419	2000	06 - 10
Mechanism of Injury ²						
Fall	7,059	8,940	9,253	12,910	12,987	51,149
Struck by/against	5,393	5,957	5,992	8,356	7,958	33,656
Motor Vehicle Traffic	2,728	3,084	3,142	4,010	3,924	16,888
Transport, Other	324	351	329	400	407	1,811
Pedal Cyclist (not MV)	248	296	333	447	349	1,673
Cut / pierce	50	50	79	60	91	330
Natural Environment	30	34	38	51	51	204
Firearm	38	38	20	29	19	144
Other / unspecified	1,742	2,028	1,984	2,513	1,595	9,862





* 84 ED visits with unspecified counties

- ¹ Based on cases where a TBI diagnosis was identified anywhere among the several diagnoses associated with the patient's visit AND a specific Emergency Department service charge was recorded in the outpatient . ambulatory care record.
- ² Table is limited to cases where a TBI diagnosis was the <u>Principal Emergency Diagnosis</u> clearly the main reason for the visit. A valid External Cause code found in the primary 'E-Code' position of the discharge record indicates the mechanism. If no valid E-Code was found, then the record was classified to the 'Other / Unspecified' category.

Appendix C: Excerpt from Publication, "A Look at Trust Fund Programs"

Publication was prepared under Contract No. HHSH250200900007C from the Department of Health and Human Services (HHS) Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB).

Table 1: Legislative Authority

Year	State	Establishment and	Revenue Code
Ratified		Administration	
1985	PA	28 Pa. Code § 4.1	35 P.S. § 6934
1988	CA	Cal Wel & Inst Code § 4358; AB	California Penal Code § 1492, Chpt. 1023
		398, Chpt. 439	
1988	FL	Fla. Stat. § 381.79	Fla. Stat. § 320.131(2) Fla. Stat. § 381.21(2)(d); Fla. Stat. § 938.07
1991	MA	ALM GL ch. 10, § 59	ALM GL ch. 90, § 20 and ALM GL ch. 90, § 24
1991	MN	Minn. Stat. § 144.661 to 665	Minn. Stat. § 171.29(Subd. 2)(c)
1991	TX	Tex. Hum. Res. Code § 111.060	Tex. Local Gov't Code § 133.102 (e) (6)
1992	AZ	A.R.S. § 41-3203	A.R.S. § 12-116.02; A.R.S. § 36-2219.01
1993	AL	Code of Ala. § 32-5A-191.2	Code of Ala. § 32-5A-191
1993	LA	La. R.S. 46:2631- La. R.S. 46:2635	La. R.S. 46:2633
1993	TN	Tenn. Code Ann. § 68-55-401	Tenn. Code Ann. § 68-55-301 to 306
1996	MS	Miss. Code Ann. § 37-33-261	Miss. Code Ann. § 99-19-73
1997	NM	N.M. Stat. Ann. § 24-1-24	N.M. Stat. Ann. § 66-8-116.3(E) and N.M. Stat. Ann. § 66-
			8-119(B)(5)
1997	VA	Va. Code Ann. § 51.5-12.2	Va. Code Ann. § 46.2-411©
1998	GA	O.C.G.A. § 15-21-148	O.C.G.A. § 15-21-149
1998	KY	KRS § 211.470 to 211.478	KRS § 42.320(2)(c-d)
2002	CO	C.R.S. 26-1-301 to 311	C.R.S. 42-4-1301(7) (d) (III); C.R.S. 42-4-1701(4) (e)
			(I&II); C.R.S. 30-15-402(3)
2002	HI	HRS § 321H-4	HRS § 291-11.5(e); HRS § 291-11.6(e); HRS § 291C-
			12(d); HRS § 291C-12.5c;
			HRS § 291C-12.6c; HRS § 291C-102©; HRS § 291E-61©
2002	MO	§ 304.028 R.S.Mo.	§ 304.028 R.S.Mo.
2002	NJ	N.J. Stat. § 30:6F-5; N.J. Stat. § 30:6F-4	N.J. Stat. § 39:3-8.2(1.b.)
2003	MT	Mont. Code Anno., § 2-15-2218	Mont. Code Anno., § 61-3-303
2004	CT	Conn. Gen. Stat. 14-295b	Conn. Gen. Stat. 14-295a
2007	WA	RCW 74.31.060	RCW 46.63.110 (7) c

Table 2: Revenue

State	Revenue Source	Administrative Overhead	Estimated Revenue 2005	Estimated Revenue 2011
AL	\$100 for each DUI conviction	\$900,000 is set aside for salaries in the Resource Coordination program and 15% for administrative overhead.	\$1.5 million	\$1.5 million
AZ	13% penalty assessment on every fine, penalty, and forfeiture related to criminal offenses and traffic, fish, and game law violations. Trust Fund receives 22% of amount collected.	Legislation allows the trust fund to cover administrative costs incurred by the Advisory Council and the Dept. of Economic Security	\$2.0 million	\$1.8 million
CA	Assessments on vehicle code, criminal and	An average of 5 – 10% is	\$1.0	\$1.0

			T	
	civil infractions are deposited in the State Penalty Fund66% of these revenues are provided to the Trust Fund.	spent on operating expenses per contract.	million	million
CO	\$15 assessment on speeding convictions; \$20 assessment on DUI convictions; \$15 assessment on motorcycle helmet violations	No more than 5% of the trust fund budget is used for administration costs.	\$1.5 million	\$2.7 million
СТ	\$5 assessment for each speeding, DUI, and reckless driving infraction	Funds are allocated to BIA-CT, some of which are used for administrative overhead	\$200,000	\$175,000
FL	\$60 (of \$135) surcharges on fines for DUI and BUI; fines for moving violations; specialty motorcycle tag fees; and \$1 (of \$2) surcharges on temporary license tags.	There is an 8% administrative handling fee imposed by the State for distributing money to the trust fund	\$17 million	\$22 million
GA	10% surcharge on fines for DUI or drug convictions	Administrative costs are approximately 25% of the total budget	\$2.3 million	\$1.95 million
НІ	\$10 surcharge for violation of child safety restraint; \$10 surcharge on seat belt violation; \$10 surcharge for speeding; \$25 for DUI; \$100 surcharge for accidents causing bodily injury; \$250 for substantial bodily injury; \$500 for accidents causing deaths.	No more than 2% of the annual revenue may be used for administrative purposes	Approx. \$600,000	\$795,000 - \$906,000
KY	5.5% of each court cost to be deposited in Trust fund – not to exceed \$2,750,000; 8% of DUI service fees (\$375) after first \$50.	Administration of the program is limited to 3%	\$3.3 million	Figure not provided
LA	\$5 surcharge on fines for speeding or reckless operation; \$25 surcharge on fine for first offense DUI, $$50 - 2^{nd}$ offense, $$100 - 3^{rd}$ offense, $$250 - 4^{th}$ offense	Legislation allows the trust fund to pay for administrative costs of the program and reimbursement of travel for Advisory Board members. The program currently supports 3 FTE staff members.	\$1.5 million	\$1.6 million
MA	\$250 assessment for DUI and driving to endanger and \$50 assessment for speeding	The bulk of administrative expenses are paid for from the general revenue fund. Only 2 – 3% of trust fund monies are used for administration.	\$6.6 - \$6.8 million	\$6.6 million
MN	\$50 surcharge on each DUI conviction	83% of trust fund revenues is available to BIA. Of that amount, 3% is spent on administration.	\$1.6 million	\$1 million
MO	\$2 surcharge on court costs related to violations of County ordinances, criminal or traffic laws	25% is available for administration	\$800,000	\$750,000
MS	\$25 surcharge for violation of DUI law; \$6 from all moving vehicle violations	1% is set aside for administration	\$3.5 million	\$3.5 million
MT	\$1 voluntary donation through motor vehicle registration	Trust Fund monies may be used for Advisory Council expenses, service planning	\$8,117	\$9,821
NJ	\$.50 surcharge on vehicle registration fees	Less than 10% is spent on administration	\$3.8 million	\$3.4 million
NM	\$5 surcharge on all moving vehicle violations	Operation and administration expenses are paid from state general revenue.	\$1.5 million	\$1.74 million
PA	25% of amount collected in surcharges on	Operation and administration	\$3 million	\$5 million

	traffic violation fines (\$10 each) and fees in lieu of jail time (\$25 each)	expenses are paid from state general revenue		(\$3 million plus unspent balance)
TN	Variable surcharges on 6 traffic violations: speeding, reckless driving, DUI, revoked license, drag racing, accidents resulting in death	About \$200,000 is used for administrative purposes.	\$750,000	\$1.0 million
TX	\$133 surcharge on felony convictions; \$83 on Class A & B misdemeanors, \$40 on convictions punishable by fines only (9.8218% of all fines collected)	Less than 5% is used for administrative purposes.	\$10.5 million	\$17.123 million
VA	Trust Fund receives \$25 of the Driver's license reinstatement fee (\$30) levied on individuals whose license has been revoked or suspended.	5% is set aside for program administration.	\$1.2 million	\$1.02 million
WA	TBI Account receives \$2 of each penalty fee imposed for violation of traffic laws	Funding is available to pay for the cost of required department staff who provide support for the Council.	N/A	\$1.86 million

Table 3: Focus and Services

(Note: More than half of the states that have a trust fund contract with their state brain injury advocacy agency for one or more services or functions. In the following table, absence of information in the third column indicates that a contract with the advocacy agency does not exist. If no information is provided in the fourth column, the information was not available to or not provided by the state agency.)

State	Program Focus	Brain Injury Association, Brain Injury Alliance (or comparable advocacy group) Contract Services	Most Requested Services/Supports
AL	Resource Coordination, Care Coordination, Attendant Care, Extended Support in Supported Employment	Resource Coordination	Care Coordination
AZ	Neurorehabilitation, IL Rehab, Resource Facilitation, Education & Training	Resource Facilitation, Education & Training, Support Groups	Varies by agency
CA	7 regionally based projects addressing community re- integration, supported living, vocational supports, I&R, public & professional education		Community re-integration, supported living, vocational supports
СО	Care coordination, services, research, education, systems navigation	Intake, Eligibility, Outreach	Care Coordination, Assistive Technology
CT	Help Line, Resource Facilitation, Community Outreach, Training, Prevention, Assistance to Support Groups	All services provided under contract with BIA-CT	
FL	Acute care, rehabilitation, community integration, nursing home transition, case management, Medicaid match, prevention, registry, special project grants		Assistive Devices, Therapies, Medications, Med Supplies, DME, Home Modifications

GA	Post-acute care and rehabilitation, Registry		Transportation; Home Modifications
н	Service coordination, education, public awareness, registry	BIA annual conference	Housing
KY	Community-based services and supports, surveillance registry		Respite
LA	Community-based services and supports, case management	Information Resource Center	Medications or Medical Supplies
MA	Non-recurring short-term community support services	Prevention, education, I & R	Case Management, Life Skills, Recreation, Respite, Dental
MN	Registry, resource and service coordination	Resource Facilitation	Employment assistance, interpersonal skills training, support groups
МО	Service coordination, purchased services		Transitional Home and Community Support
MS	Registry, waiver match,, IL services, transitional living, recreation, annual nursing survey		Personal Care Attendants
MT	Advisory Council, grants for public awareness, prevention education		
NJ	Community-based services and supports, public awareness, education	Public Awareness and Education	Cognitive Therapy, Case Management, Physical Therapy, Assistive Technology, Home Modifications
NM	Service coordination, life skills coaching, crisis interim services, systems navigation (BIA), alternative therapies	Outreach, I&R, Education, Self- advocacy Training, Systems Navigation	Alternative therapies, medical transportation, homecare services
PA	Assessment, short-term community- based rehabilitation services, transition case management	Program Pre-enrollment Assistance, Assistance in Applying for Services	Life Skills Training, Therapies
TN	Registry, Supported Living, Service Coordination (via grants for community-based projects)		
TX	Inpatient, outpatient, and post-acute rehabilitation services, case management, services for contractures and behavior issues		Post Acute Rehabilitation
VA	Grants for community-based rehabilitation projects, applied research projects		
WA	Resource facilitation, support groups, staff Support to Advisory Council, Public Awareness campaign	Resource facilitation, helpline	Resource line